

REMARKS

Reconsideration and allowance of the present patent application based on the foregoing amendments and following remarks are respectfully requested.

By this Amendment, claims 8, 11-13, 15 and 18 are amended without any intention of narrowing the scope of any of the claims. No new matter has been added. Accordingly, after entry of this Amendment, claims 1-18 will remain pending in the patent application

Applicant appreciates the Examiner's indication that claims 1-7 are allowed.

Claims 8-18 were rejected under 35 U.S.C. §112, second paragraph. The rejection is respectfully traversed.

In connection with the rejection of claim 8, the Examiner indicated that the recitation "by radiation and/or by introduction of ionic species" is inherently indefinite. Applicant respectfully disagrees and notes that the specification makes clear that the refractive index of the substrate is modulated by either (1) radiation, (2) ionic species or (3) both, i.e. radiation and ionic species. The Examiner's attention is directed to page 10, lines 5-11, of the present application in which it is clearly taught that ionic implementation and/or radiation can be used to modulate the substrate. As such, based on the original description of the present application, one of ordinary skill in the art would readily understand what is meant by the language "by radiation and/or by introduction of ionic species." Accordingly, Applicant respectfully submits that the language of claim 8 is definite and that one of ordinary skill in the art would readily ascertain the scope of this claim. However, in an abundance of caution, claim 8 is amended to recite that the refractive index of the substrate is modulated by radiation, ionic species or both. Accordingly, Applicant respectfully submits that the amendment to claim 8 fully obviates the claim rejection.

With respect to claim 18, this claim is amended to recite that the first and second ionic species include  $\text{Ag}^+$  or  $\text{K}^+$  ions.

Claims 9-17 are patentable by virtue of their dependency from claim 8.

Accordingly, reconsideration and withdrawal of the rejection of claims 8-18 under 35 U.S.C. §112, second paragraph are respectfully requested.

Claims 11-13 were objected to because of an informality noted in the Office Action. In response, the claims are amended in the manner suggested by the Examiner. Accordingly, reconsideration and withdrawal of the objection to claims 11-13 are respectfully requested.

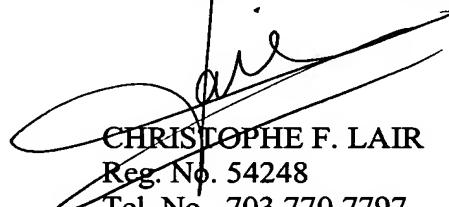
The rejection and objection having been addressed, Applicant respectfully submits that the application is in condition for allowance, and a notice to that effect is earnestly solicited.

If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

PILLSBURY WINTHROP SHAW PITTMAN LLP



CHRISTOPHE F. LAIR  
Reg. No. 54248  
Tel. No. 703.770.7797  
Fax No. 703.770.7901

JSB/CFL/smm  
P.O. Box 10500  
McLean, VA 22102  
(703) 770-7900